

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,047	02/13/2002	Norbert Becker	3286-0171P	7826
75	90 05/05/2005		EXAMINER	
Harness Dickey & Pierce PLC P O Box 8910			TRUONG, CAM Y T	
Reston, VA 2	0195		ART UNIT	PAPER NUMBER
			2162	<u>-</u>
			DATE MAILED: 05/05/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/936,047	BECKER ET AL.			
		Examiner	Art Unit			
		Cam Y T Truong	2162			
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address			
THE I - External after - If the - If NO - Failur Any I	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period vere to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status		•				
1)⊠	Responsive to communication(s) filed on 09 F	ebruary 2005.				
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.					
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Dispositi	ion of Claims	•				
4)⊠	Claim(s) 1-18 is/are pending in the application		•			
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) 🗌	5) Claim(s) is/are allowed.					
6)⊠	⊠ Claim(s) 1-18 is/are rejected.					
7)	Claim(s) is/are objected to.					
8)□	Claim(s) are subject to restriction and/o	r election requirement.				
Applicati	on Papers					
9)	The specification is objected to by the Examine	РГ.				
10)🖾	The drawing(s) filed on 09 February 2005 is/are	e: a)⊠ accepted or b)⊡ objecte	d to by the Examiner.			
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority i	under 35 U.S.C. § 119					
12)	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. & 119/a	)-(d) or (f)			
-	☑ All b)☐ Some * c)☐ None of:	phony under 55 c.c.s. 3 115(a)	, (u) 01 (i).			
٠,١	1.⊠ Certified copies of the priority document	s have been received.				
	2. Certified copies of the priority document		on No.			
	3. Copies of the certified copies of the prio		· · · · · · · · · · · · · · · · · · ·			
	application from the International Bureau	*	Ğ			
* 9	See the attached detailed Office action for a list		ed.			
			ANDIN			
	•		SHAHID ALAM SHAHID ALAM SYAMINER			
Attachmen	t(s)		SHAHID ALAM			
	e of References Cited (PTO-892)	4) Interview Summary	SPAHID ADMINER  (PTO-413)PRIMARY EXAMINER  ate			
	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate atent Application (PTO-152)			
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	6) Other:				
S. Patent and To TOL-326 (R	rademark Office ev:-1-04)	ction Summary Pa	rt of Paper No./Mail Date 20050418			

U -p Art Unit: 2162

## **DETAILED ACTION**

## Response to Arguments

1. Applicant has amended claims 1, 2, 8, 10 and added claim 17 and 18 in the amendment filed on January 9, 2005. Claims 1-18 are pending in this Office Action.

Applicant's arguments filed January 9, 2005 have been fully considered but they are not persuasive for the following reasons.

Applicant argues on pages 11 – 13 that Weinberg does not teach a directory storing an object name of the automation object; the object name is assigned to a directory entry; an automation object.

Examiner respectfully disagrees the entire allegation as argued.

Examiner, in her previous office action, gave detail explanation of claimed limitation and pointed out exact locations in the cited prior art.

In response to applicant's argument on pages 11-13, Weinberg does not teach a directory storing an object name of the automation object. Weinberg teaches that a directory tree or map stores node object names such as xunner, uparrow and Mercury Interactive Product of the site graph object. Node object names are represented as object names of the site graph object (figs. 3&8, col. 10, lines 64-66).

Applicant argued that Weinberg does not teach the object name is assigned to a directory entry". Weinberg teaches the object name xunner is assigned to a node object as a directory entry (figs. 3&8, col. 10, lines 64-66).

Art Unit: 2162

Applicant argued that Weinberg does not teach an automation object. Weinberg teaches as a site graph object in object model of automation Astra corresponds generally to a map of a web site. The site graph includes nodes and links. The site graph object is represented as an automation object (figs. 7&8, col. 19, lines 7-10; col. 10, lines 25-26).

In view of the above, the examiner contends that all limitations as recited in the claims have been addressed in this Action.

For the above reason, examiner believed that rejection of the last office action was proper.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberg et al (USP 5974572) in view of Bentley et al (or hereinafter "Bentley") (US 5987242).

As to claim 1, Weinberg teaches an automation system (col. 7, lines 45-49) comprising:

Art Unit: 2162

"an automation object" as a site graph object in object model of automation Astra corresponds generally to a map of a web site. The site graph includes nodes and links. The site graph object is represented as an automation object (figs. 7&8, col. 19, lines 7-10; col. 10, lines 25-26);

"a directory for storing an object name of the automation object" as a directory tree or map stores node object names such as xunner, uparrow and Mercury Interactive Product of the site graph object. Node object names are represented as object names of the site graph object (figs. 3&8, col. 10, lines 64-66);

"an object name assigned to a directory entry which includes first information data as a reference to the automation object" as tree stores a leaf node name Xunner of parent node Mercuy Interactive product. The object node Xunner contains the URL i.e., <a href="http://beebop:680/banners/xunner.gif">http://beebop:680/banners/xunner.gif</a> and the number of inbound links and outbound links. The parent node Mercury Interactive product is connected to the object node Xunner by a link. This link, which, is a incoming link of object node Xunner, is represented as a reference to parent node Mercury Interactive product (fig. 3, col. 11, lines 9-23; col. 16, lines 42).

"second information date data as a description of technological functionality" as the node object name Xunner contains the outbound links. To display a node's outgoing links, the user selects the node with the mouse and then clicks on the show outgoing links button 72 on the tool bar. Astra then displays all outgoing links from the node. The above information shows that the outgoing links of a node object is a description of functionality of the node object.

Art Unit: 2162

The outgoing links of the node object name xunner is represented as description of technological functionality (figs. 3&6, col. 11, lines 9-13; col. 17, lines30-33), and

"third information data as a description of an interface of the automation object" as The object node Xunner contains the URL i.e.,

<a href="http://beebop:680/banners/xunner.gif">http://beebop:680/banners/xunner.gif</a> and the number of inbound links and outbound links. The parent node Mercury Interactive product is connected to the object node Xunner by a link. Xunner.gif is represented as a description of an interface (fig. 3, col. 11, lines 9-23; col. 16, lines 42),

"wherein once entry into the directory has taken place, the automation object can be viewed by at least one of other users and tools" as in fig. 3, a user can view the site map including parent node object 44 and seven leaf node objects 48. One the map has been generated, the user can interactively navigate the map using various navigation tools of Astra GUI, such as scrolling controls 40 and 42 (col. 9, lines 54-57); and,

"wherein the object name of the automation object can be used to request a reference to the automation object" as node object name xunner of parent node object 44 is assigned to a leaf node of a tree. The node object name Xunner contains the URL i.e., <a href="http://beebop:680/banners/xunner.gif">http://beebop:680/banners/xunner.gif</a> and the number of inbound links or incoming links and outbound links. As illustrated in fig. 22, an analogous display format is used for displaying the incoming links to a node. Leaf node objects or children node object link back to their parents. The above information shows an incoming link of the leaf node object name Xunner can be

Art Unit: 2162

used to request as a reference to the site graph object (figs. 3&22, col. 11, lines 9-13; col. 17, lines30-33).

Weinberg does not explicitly teach the claimed limitation "and wherein the automation object can be worked on by a number of users in parallel to create automation solutions".

Weinberg teaches larger numbers of concurrent visitors access the web site on web servers via Internet or Intranet (fig. 7, col. 32, lines 57-58). Bentley teaches that projects are managed as a single unit by the CMS and are stored in a project database, generally on a networked server, so that concurrent access can be granted to multiple users of the project. To initiate a user session, a user executes a query of the project database to extract a subset of the project from the project database into a local database. The extraction is considered a long-term transaction to the project database such that during the user session no further interaction with the project database is required. If changes or additions are made to the extracted model objects during an editing session, such as changes and additions may be posted to the project database at the end of the user session (col. 4, lines 60-67; col. 5, lines 1-10).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Frauenhofer's teaching of automatically creating channel map that contains a list of web servers, directories and other targets by using crawlers at the system server or Customer Intranet Server and allowing users to access the channel map to edit the pre-defined categories to support collaborative computing between users within a computer system

Art Unit: 2162

network by an enterprise having a plurality of objects and further allow many users to work together on objects simultaneously.

As to claims 2 and 10, Weinberg teaches the claimed limitation "wherein the directory entry includes fourth information data for listing the names of subcomponents of the automation object" as shown in fig. 6, the system displays a tree. A parent node 88 is displayed at the first level. The leaf node objects are displayed at second level and the second leaf node of the parent node object contains two another leaf node names that are displayed at third level of the tree. The leaf node names of the second leaf node are presented as the names of subcomponents of the at least one automation object. The parent node 88 is represented as the at least one automation object (fig. 6, col. 17, lines 28-32).

As to claims 3 and 5, Weinberg teaches the claimed limitation "wherein the automation system includes means for the automatic entry of an automation object into the directory" as Astra automatically scans the Web site and creates a graphic site map showing all of the URLs of the site and the links between these URLs. The layout and display method used by Astra for generating the site map provides a highly intuitive, graphical representation, which allows the user to visualize the layout of the site. As illustrated in fig. 4, a site map is displayed to a user. Each leaf node such as company and 10k.pdf is represented as entry of parent node mercury Interactive Online within site map or tree. Whenever the user selects a node in the upper window 76, the corresponding line in the list view window 78 is automatically highlighted. Each

Art Unit: 2162

leaf node within site map or tree is represented as automation entry. The parent node Mercury Interactive Online is represented as automation object. The site map or tree is represented as the directory. Astra is represented as the automation system (col. 7, lines 45-49; col. 16, lines 60-63).

As to claims 4 and 6-8, Weinberg teaches the claimed limitation "wherein the automation system includes means for indicating that an automation object is no longer available" as a node object 45 of the site map in fig. 3, which is indicated a question mark and implies missing its URL, shows this object node no longer available (col. 10, lines 19-25). Also, any node object on a site map has a deleted URL as indicated in deleted URL box as shown in fig. 21 implies that node object is no longer available too. The node object 45 is represented as automation object and "that a copy of the object is being created" as to restore the visual web display view, the user clicks on the VWD button 73. The Visual Web Display View contains node objects. When the system restores the Visual Web Display View, the system restores node objects (fig. 1, col. 12, lines 45-46). Restore means to copy back (Computer Dictionary, page 410, col. Right, lines 1-4).

As to claim 9, Weinberg teaches an automation system (col. 7, lines 45-49) comprising:

"a memory for storing an object name of an automation object as a directory entry in a directory" as Astra of client computer automatically scans the

Art Unit: 2162

Web site and creates a graphic site map or tree showing all of the URLs of the site and the links between these URLs. The layout and display method used by Astra for generating the site map provides a highly intuitive, graphical representation, which allows the user to visualize the layout of the site. As illustrated in fig. 3, a site map is displayed to a user. This site map stores node object names such as Xunner and Uparrow of parent node object 44. The node object name is stored in a leaf node of site map. The above information shows that client computer has included a memory for storing object names such as Xunner and Uparrow. The node object name is represented as object name. The site map or tree is represented as a directory (fig.8, col. 10, lines 64-66; col. 7, lines 45-49);

"wherein an object name includes, first information data as a reference to the automation object" as node object name Xunner of parent node object 44 is assigned to a leaf node of a tree. The node object name Xunner contains the URL i.e., <a href="http://beebop:680/banners/xunner.gif">http://beebop:680/banners/xunner.gif</a> and the number of inbound links or incoming links and outbound links. As illustrated in fig. 22, an analogous display format is used for displaying the incoming links to a node. Leaf node objects or children node object link back to their parents. The above information shows an incoming link of the leaf node object name Xunner that is represented as reference to the parent node object 44 (figs. 3&22, col. 11, lines 9-13; col. 17, lines30-33),

"second information data as a description of technological functionality" as the node object name Xunner contains the URL i.e.,

Art Unit: 2162

http://beebop:680/banners/xunner.gif and the number of inbound links and outbound links. To display a node's outgoing links, the user selects the node with the mouse and then clicks on the show outgoing links button 72 on the tool bar. Astra then displays all outgoing links from the node. The above information shows that the outgoing links of a node object is a description of functionality of the node object. The outgoing links of the node object name Xunner is represented as description of technological functionality (figs. 3&6, col. 11, lines 9-13; col. 17, lines30-33), and

"third information data as a description of an interface of the automation object" as shown in fig. 3, the parent node object 44 has many children node object 48; thus, it has many interfaces. The node object name Xunner contains the URL i.e., <a href="http://beebop:680/banners/xunner.gif">http://beebop:680/banners/xunner.gif</a>. Xunner.gif is represented as a description of interfaces of parent node object 44 (fig. 3, col. 11, lines 9-13; col. 17, lines 30-33);

"wherein the automation object, when in the directory, is viewable by at least one of another user and tool" as in fig. 3, a user can view tree map including parent node object 44 and seven leaf node objects 48. One the map has been generated, the user can interactively navigate the map using various navigation tools of Astra GUI, such as scrolling controls 40 and 42 (col. 9, lines 54-57); and,

"wherein the object name of the automation object is usable to request a reference to the automation object" as node object name Xunner of parent node object 44 is assigned to a leaf node of a tree. The node object name Xunner

Art Unit: 2162

contains the URL i.e., <a href="http://beebop:680/banners/xunner.gif">http://beebop:680/banners/xunner.gif</a> and the number of inbound links or incoming links and outbound links. As illustrated in fig. 22, an analogous display format is used for displaying the incoming links to a node. Leaf node objects or children node object link back to their parents. The above information shows an incoming link of the leaf node object name Xunner that is represented as reference to the parent node object 44 (figs. 3&22, col. 11, lines 9-13; col. 17, lines30-33).

Weinberg does not explicitly teach the claimed limitation "wherein the automation object is usable by a plurality of users in parallel to create automation solutions".

Weinberg teaches larger numbers of concurrent visitors access the web site on web servers via Internet or Intranet (fig. 7, col. 32, lines 57-58). Bentley teaches that projects are managed as a single unit by the CMS and are stored in a project database, generally on a networked server, so that concurrent access can be granted to multiple users of the project. To initiate a user session, a user executes a query of the project database to extract a subset of the project from the project database into a local database. The extraction is considered a long-term transaction to the project database such that during the user session no further interaction with the project database is required. If changes or additions are made to the extracted model objects during an editing session, such as changes and additions may be posted to the project database at the end of the user session (col. 4, lines 60-67; col. 5, lines 1-10).

Art Unit: 2162

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Frauenhofer's teaching of automatically creating channel map that contains a list of web servers, directories and other targets by using crawlers at the system server or Customer Intranet Server and allowing users to access the channel map to edit the pre-defined categories to support collaborative computing between users within a computer system network by an enterprise having a plurality of objects and further allow many users to work together on objects simultaneously.

As to claims 11 and 13, Weinberg teaches the claimed limitation "wherein the automation system further comprises means for the automatic entry of an automation object into the directory" as Astra automatically scans the Web site and creates a graphic site map showing all of the URLs of the site and the links between these URLs. The layout and display method used by Astra for generating the site map provides a highly intuitive, graphical representation, which allows the user to visualize the layout of the site. As illustrated in fig. 4, a site map is displayed to a user. Each leaf node such as company and 10k pdf is represented as entry of parent node mercury Interactive Online within site map or tree. Whenever the user selects a node in the upper window 76, the corresponding line in the list view window 78 is automatically highlighted. Each leaf node within site map or tree is represented as automation entry. The parent node Mercury Interactive Online is represented as automation object. The site

Art Unit: 2162

map or tree is represented as the directory. Astra is represented as the automation system (col. 7, lines 45-49; col. 16, lines 60-63).

As to claims 12 and 14-16, Weinberg teaches the claimed limitation "wherein the automation system further comprises means for indicating that an automation object is no longer available" as a node object 45 of the site map in fig. 3, which is indicated a question mark and implies missing its URL, shows this object node no longer available (col. 10, lines 19-25). Also, any node object on a site map has a deleted URL as indicated in deleted URL box as shown in fig. 21 implies that node object is no longer available too. The node object 45 is represented as automation object and "that a copy of the object is being created" as to restore the visual web display view, the user clicks on the VWD button 73. The Visual Web Display View contains node objects. When the system restores the Visual Web Display View, the system restores node objects (fig. 1, col. 12, lines 45-46). Restore means to copy back (Computer Dictionary, page 410, col. Right, lines 1-4).

As to claim 17, Weinberg teaches the claimed limitation "a plurality of automation objects having object names, respectively, wherein the directory stores the object names" as (fig. 4, col. 9, lines 54-57);

"wherein the object names are respectively assigned to directory entires" as (figs 3&4; col. 9, lines 54-57);

Art Unit: 2162

"wherein each of directory entries includes associated first, second and third information data" as (figs 3&4; col. 9, lines 54-57)

As to claim 18, Weinberg teaches the claimed limitation "wherein the memory stores a plurality of object names of a plurality of automation objects, respectively, wherein each of the object names includes associated first, second and third information data (figs. 3&7, col. 9, lines 54-57).

### Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2162

#### **Contact Information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Firday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cam-Y Truong Patent Examiner Art Unit 2162 4/20/2005

> SHAHID ALAM SHAHID EXAMINER DRIMARY EXAMINER